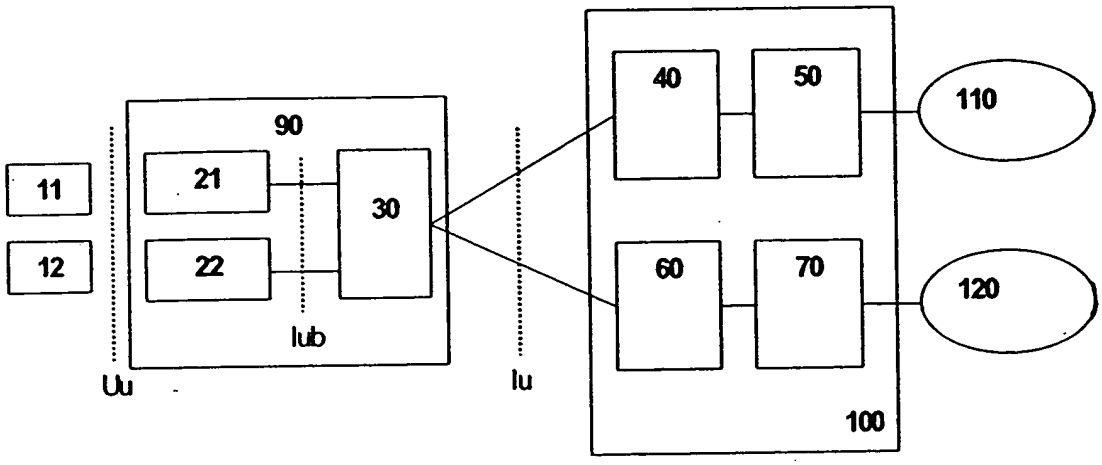


Fig. 1

Group id	UE id	Power inf	Location inf
Xxx	Xx1	+11	1
yyy	X11	-4	1
zzz	X21	-3	2
yyy	X33	+3	2
yyy	X75	+2	4
xxx	X45	-35	1
yyy	X34	000	2

FIG. 6

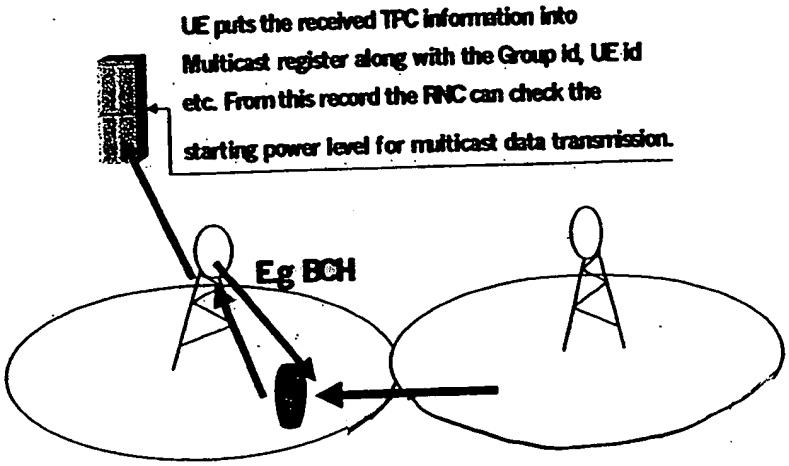

UE puts the received TPC information into
Multicast register along with the Group id, UE id
etc. From this record the RNC can check the
starting power level for multicast data transmission.
Eg BCH

FIG. 2

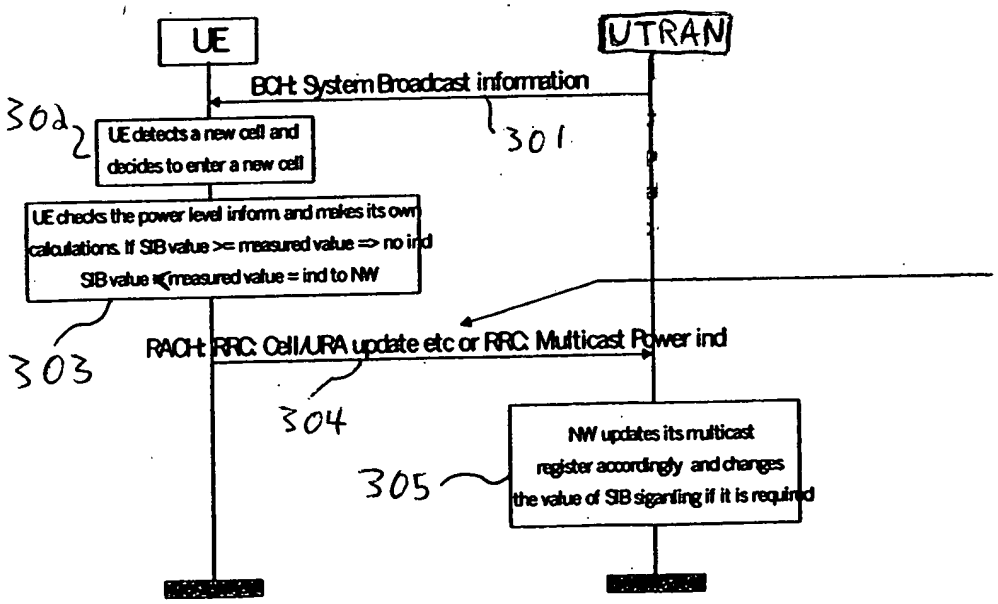
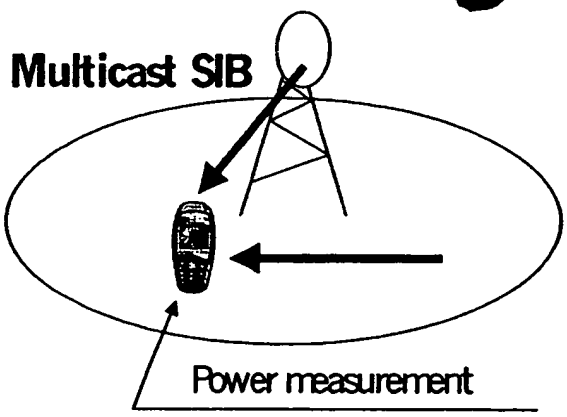

UE
UTRAN
BCH: System Broadcast information
301
302
UE detects a new cell and
decides to enter a new cell
UE checks the power level inform and makes its own
calculations. If SIB value >= measured value => no ind
SIB value < measured value = ind to NW
303
RACH: RRC: Cell/URA update etc or RRC: Multicast Power ind
304
305
NW updates its multicast
register accordingly and changes
the value of SIB siganling if it is required

FIG. 3



SIB value >= measured value => no ind

SIB value > measured value = ind to NW

FIG. 4

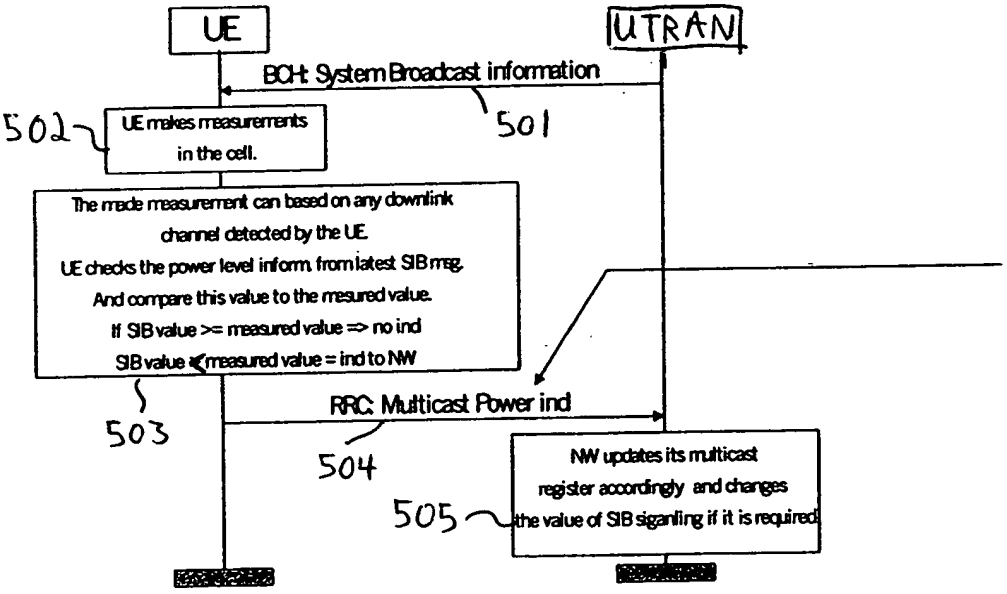


FIG. 5

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Message Type	MP		Message Type	
UE information elements				
U-RNTI	MP		U-RNTI 10.3.3.47	
RRC transaction identifier	CV-*Failure*		RRC transaction identifier 10.3.3.36	
Integrity check info	CH		Integrity check info 10.3.3.16	
START list	MP	1 to <maxCNdomains>		START [40] values for all CN domains.
>CN domain identity	MP		CN domain identity 10.3.1.1	
>START	MP		START 10.3.3.38	START value to be used in this CN domain.
AM_RLC error indication(RB2, RB3 or RB4)	MP		Boolean	TRUE indicates AM_RLC unrecoverable error [16] occurred on RB2, RB3 or RB4 in the UE
AM_RLC error indication(RB>4)	MP		Boolean	TRUE indicates AM_RLC unrecoverable error [16] occurred on RB>4 in the UE
Cell update cause	MP		Cell update cause 10.3.3.3	
Failure cause	OP		Failure cause and error information 10.3.3.14	
RB timer indicator	MP		RB timer indicator 10.3.3.28	
Mu Power control ind.	OP			Identifies requested power level for multicast services
Mu-UE identity	OP			Identifies certain multicast subscriber
Multicast group/service identity	OP			Identifies certain multicast group or service
Measurement information elements				
Measured results on RACH	OP		Measured results on RACH 10.3.7.45	

RRC (25.331) changes

Condition	Explanation
Failure	This IE is mandatory present if the IE "Failure cause" is present and not needed otherwise.

FIG. 7

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Message Type	MP		Message Type	
UE information elements				
U-RNTI	MP		U-RNTI 10.3.3.47	
RRC transaction identifier	CV-*ProtErr*		RRC transaction identifier 10.3.3.36	
Integrity check info	CH		Integrity check info 10.3.3.16	
URA update cause	MP		URA update cause 10.3.3.46	
Protocol error indicator	MD		Protocol error indicator 10.3.3.27	Default value is FALSE
Mu Power control ind.	OP			Identifies requested power level for multicast services
Mu-UE identity	OP			Identifies certain multicast subscriber
Multicast group/service identity	OP			Identifies certain multicast group or service
Other information elements				
Protocol error information	CV-*ProtErr*		Protocol error information 10.3.8.12	

RRC(25.331) changes

Condition	Explanation
ProtErr	The IE is mandatory present if the IE "Protocol error indicator" has the value "TRUE" and not needed otherwise.

FIG. 8

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Message Type	MP		Message Type	
UE information elements				
Mu-UE identity	MP			Identifies certain multicast subscriber
Multicast group/service identity	MP			Identifies certain multicast group or service
Mu Power control ind.	OP			Identifies requested power level for multicast services

RRC(25.331) changes

FIG. 9

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Message Type	MP		Message Type	
UE information elements				
Integrity check info	CH		Integrity check info 10.3.3.16	Integrity check info is included if integrity protection is applied
CN information elements				
CN domain identity	MP		CN domain identity 10.3.1.1	
NAS message	MP		NAS message 10.3.1.8	
Mu-UE identity	OP			Identifies certain multicast subscriber
Multicast group/service identity	OP			Identifies certain multicast group or service
Mu Power control ind.	OP			Identifies requested power level for multicast services
Old multicast area identity	OP			To indicate the old multicast area. New RNC can used this identity to update the multicast status information in the old RNC.
Measurement information elements				
Measured results on RACH	OP		Measured results on RACH 10.3.7.45	

RRC (25.331) changes

FIG. 10